

## The Study of the Relationship between Agriculture Produce Type and the Agricultural Tourist (Agrotourist) Attraction Feasibility in the Southern Khorasan Province

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### Abstract

Today, agricultural tourism is regarded as one of the stimulus for atonal economy of agriculture sector, a tendency for sentimental and nostalgic roots of a modern world citizen and some factors such as visit or participation in the farm activities, direct purchase of the farm products, spending one night in the farm, curiosity and learning about the agriculture farm and its products give the ability to create a society with an extensive goal. The southern Khorasan province with much potential in agriculture in the products like barberry, pomegranates and especially saffron and the capability of different tourisms such as natural tourism, astronomy, geotourism, and desert tourism, can accountably crystallize a special space in the field of agriculture or rural tourism. The present research aim is to identify the capabilities and capacities of the southern Khorasan Province tourism with regard to the priority categorization of the eligible arena that have the potential to attract tourist in order to promote the agricultural tourism. For this purpose, after the recognition of standards and sub-standards of agricultural tourism with utilization of the Analytic Hierarchy Process (AHP) in the software model SUPER DECISION, the agricultural tourism of southern Khorasan Province was explained and with the entry of qualitative and quantitative data 25 sub-standard model, the privilege of each town in the agriculture tourist attraction realization feasibility variable was determined and the towns of the province were positioned in four arena. Thereafter, the privilege of each town from the four sub-standards which had a relationship with the produce type variable was separately calculated. The Pearson correlation coefficient of these eight data pairs was in the 0.9, SPSS, software which demonstrated the existence of a significant relationship between the agrotourist attraction realization feasibility in the southern Khorasan province and the type of orchard and field agriculture produce.

**Keywords:** Agricultural tourism, Southern Khorasan province, Pearson Correlation Coefficient, Analytic Hierarchy Process (AHP), Saffron.

### Introduction

Today, despite the achieved extensive human progresses, the rural development is still facing numerous issues as well as challenges, as the past strategies in the rural development sector were unsuccessful and incapable to eliminate the issues such as poverty, employment, health, food security and the environment stability (Eftekhariyan , 21, 2005).

In order to strengthen the villages and deprived regions, varied strategies have been proposed, but none of them could assist in the condition improvement of the deprived areas and those that have remained away from the variation trend and development alterations. One of the strategies which is suggested for the strengthening of the deprived areas and has a developmental

capacity is the development and the tourism expansion in the areas that possess the needed potentials for the tourism development. The tourism industry with reliance on its characteristics and economic effects can in a way be quite effective in the movement and plays a major role in the dynamism of different sections of the local communities' economy, which eventually leads to the development of the rural and low developed areas (Heidari, 45, 2006).

Today's unfocused world economy, in the line with an appropriate output avails form to the different combinations which shatters the new economic divisions (industry, agriculture and services). One of these combinations is the integration of the agriculture and service sections and the birth of agricultural tourism. This tourism process, on one hand, will attract the tourists that are in lookout to gain the new locations and in some cases participate in the agriculture stages to earn the original tourism experiences and on the other hand will improve the economic condition of the orchard and field owners ((hosting society). The traditional nature of these fields has a significant role in the tourism promotion in a manner that the nostalgic feel, encourages tourists to observe and experience a traditional living.

The southern Khorasan province, which is located in the east of the country, with an area of 95388 square kilometres has accounted to the 5.8 percent of the total country area and based on the latest country divisions this province has eight counties viz. Birjand, Qaenat, Ferdows, Boshruyeh, Darmian, Sarayan, Sarbisheh, Nehbandan, Khusf and Zirkouh (Statistical calendar, 2011) and with the population amounting to 625344 people (Governor of southern Khorasan, 2011) in some agriculture products in the country has an advantage where these products in other areas are either not cultivated or with an investment in it are not gaining enough profit.

This province ranks first in the production of the orchard barberry and jujube and second position in the production of saffron and cotton in the Iran level. Besides, this province is the sixth producer of pomegranate among the Iran provinces and the Ferdows County after Saveh and Neyriz counties are the third producer of pomegranate in Iran. The area under saffron cultivation is 10554 hectares where annually 50 tones of dried saffron are produced from it (24.6% of country's total production). This province in the barberry production amounting to 8404 tonnes annually and possessing 97% of the lands under cultivation is regarded as the prime producer in the country in the above mentioned product (South Khorasan Agricultural Jihad Statistic Information Portal, 2011). In this field, the saffron produce in the country and Khorasan province possesses a comparative advantage:

- Abundant profitability and high level of its production in comparison to the agriculture produces of other province
- Presence of over 90,000 family beneficiary of this product that arranges the possibility of accommodating peculiar agricultural tourism (place, breakfast) and the field for saffron harvesting education
- The product harvest time is assimilated with several attractions because the open buds have to be necessarily plucked before the sunrise and the harvesting takes place between 15 to 25 days (from late October to November beginning).
- The simultaneous harvesting of saffron and barberry leads to the increasing potential of tourist attraction. Two agricultural tourism festivals of saffron known as ``red gold'' and barberry known as ``ruby'' in the Qaenat county is also held during the same time.
- The harvesting period of saffron in the month of October and November against tourism-herald means summer season and the structuring of the agricultural tourism in the regional dimensions can arrange a continuous period i.e. ``tourism cycle'.

In this research, efforts are made that with investigation of agriculture tourism concept and its structure, the correlation relationship between the agricultural tourism realization feasibility and the product type variables were calculated and then the quantitative and qualitative analyses were presented.

### **The theoretical backgrounds**

The agricultural tourism as a direct marketing activity could avail special opportunities for the reduction of risk growth through the diverse route in an urban and contradictory economic environment (Brunfield, 54, 2002), which contains the rural trade in the two directions of farm environment and one section of tourism trade (Busby, 13, 2000). The margined areas that are located upon the basis of traditional and limited agriculture have more need to economically diversity and will also be more attractive for the tourists (Sharili, 2001). The words similar to farm tourism, rural tourism, outback tourism, culinary tourism, in the corresponding compilations, are used in synonym with each other (Rilla, 23, 1999).

**Table 1. Different definitions of agricultural tourism**

Theorist	Year	Definition
Darlington Amenity Research	<b>1974</b>	Each tourist with related participation with fun Trust and entertainment that works on the farm
Frater	<b>1983</b>	tourism companies that work over the fields and up to a large extent, this recreational affair is in line with the fields agricultural activities.
Murphy	<b>1985</b>	Work in the fields which completes and supports the prime performance (agricultural) with some of the tourism business types.
Murphy	<b>1995</b>	The field tourism, which is demonstrative of the continuous and regular ownership, an active participation <i>via</i> the agriculture and the tourism investments is small in the scale.
Clarke	<b>1996</b>	Dependent on the agriculture produces in a place where the consumer is aware of the farm agriculture environment.

### **Research methodology**

The research methodology of this research is a descriptive one, which is based on the goal in the correlation solidarity studies. In this research, the hypothesis are explained and considering the examination of this hypothesis the presumptive statistic and Pearson correlation coefficient is used. The two variables of this hypothesis include the agricultural tourism attraction feasibility in the south Khorasan and the agriculture produce type and the area under their cultivation.

### **Research hypothesis**

Agricultural tourism attraction feasibility in the Southern Khorasan has a significant relationship with orchard and agriculture produce type.

### **Procedure and Data Analysis**

For the first variable, the normalizing weight of each county was obtained through Analytic Hierarchy Process for the priority classification of the agriculture tourism arena. Initially, based on the agriculture tourism model of Southern Khorasan which consist of 25 substandard, its qualitative and quantitative data were entered into the SUPER DECISION software and the even comparison of

counties in each substandard was carried out with the Analytic Hierarchy Process or AHP. Thereafter, the privileges of provinces from each substandard in its weight substandard was multiplied and the obtained value was normalized, which depicts that the Birjand and Qaen counties (first arena) with total points of 0.20 and 0.21 with the relation difference to other counties is regarded as the preferable arena for the creation of agriculture tourism business in the Southern Khorasan. Ferdows (second arena) with 0.13 gained third rank and higher than the counties (Sarayan, Sarbisheh and Nehbandan) (third arena) which gained 0.09 points, was placed and the Darmian and Boshruyeh counties (fourth arena) with 0.08 scored the least privileges.

The second variable was normalizing point equivalent of each county from the total four substandard analytical models which included the area under saffron cultivation, the area under cultivation of orchard produces, the number of greenhouses, inclination to perform the agriculture tourism activities. In this line, the privileges of each township from the binary comparison table of each substandard was extracted and multiplied in its substandard weight. At the end, the total privileges of each county were used as a qualitative data variable.

**Table 2. Normalizing privileges of the test variables**

Township	Product type	Feasibility
Birjand	0.216	0.2092
Qaenat	0.357	0.2049
Ferdows	0.181	0.1304
Nehbandan	0.064	0.0962
Sarbisheh	0.114	0.0944
Sarayan	0.106	0.0987
Darmian	0.064	0.0831
Boshruyeh	0.085	0.0831

**Table 3. Pearson Correlation Coefficient calculations between the agricultural tourism feasibility and agriculture produce type variable Correlations**

	Agritourism	Product
Agritourism Pearson correlation	1	.900**
Sig.(2-tailed)		.002
N	8	8
Product Pearson correlation	.900**	1
Sig. (2-tailed)	.002	
N	8	8

\*\*Correlation is significant at the 0.01 level (2-tailed)

Considering the obtained results of the Pearson Correlation test, there is a significant relationship between the two variables, tourism feasibility and the produce type variables and the area under cultivation of agriculture produce of Southern Khorasan ( $r = .9$ ; Sig = .002).

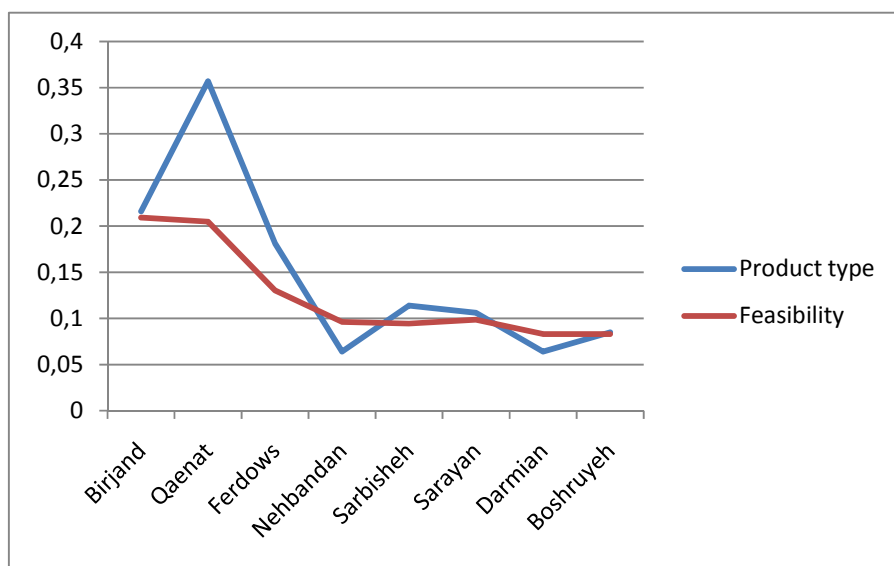
#### Investigating the significant level

After the correlation coefficient calculation, a researcher should investigate its significance or non-significant nature. If the observed value is equivalent or more than the categorization value for an appropriate level of significance and the freedom degrees (the numbers of score pairs minus

2), it can be concluded that there exists a significant and an important statistical relationship between the variables in the sampling society (Hafez Nia, 96, 2009).

Presently, since there are 8 pairs of scores, the freedom degree is 6 and for the number 6 in the mentioned table, a significant level of 0.8343 is specified. Therefore, the calculated correlation coefficient (0.900) is bigger than the significant 0.8343 level. Thus, there exists a significant relationship between the two variables.

In the SPSS software, if the significant level amount is less than 0.05, assumption zero with a probability of 95 percent will be rejected and even if the amount is less than 0.01, assumption zero<sup>1</sup> with a probability of 99 percent will be rejected since the test significant level of this assumption (0.002) is less than 0.01. Therefore, between the two variables of southern Khorasan agricultural tourism feasibility and the product type there exist a direction relationship with a level of 99 percent and the hypothesis becomes zero (along with the hypothesis the research is confirmed).



**Figure 1. Two variable correlation chart**

The correlation coefficient has calculated the correlation level between the two distancing or comparative variables and its level is between -1 and +1. Because the obtained level is positive, it relates that the variation of two variables like each other is directional. It means that with an increase in each variable, the other variable also increases and since its level is very close to +1, the variation of one of the variables has a much effect on the other.

## Results

The importance of the product type and the area under product cultivation is dependent on the farm agricultural tourism and the optimal use of each product condition can attract several tourists. For example, the pumpkin or corn forage produce, although it does not give enough profit in the direct sale of the product to the farm owner, in other agritourism activities like intermingling spiral of corn in the farm or handicrafts creation from the pumpkin skin, it can be attractive as well as profitable.

<sup>1</sup> Zero assumption: between two variables exist a significant relationship

The obtained results of this hypothesis test, demonstrate that the Qaenat County in the agricultural product type and the area under cultivation in the province variable is having advantages and superiority and is recognized with the major products such as saffron and barberry and thus it can act in the dimensions of successful direct and indirect income raising activities of agricultural tourism.

Second, the product type is related to some factors like the visual attraction of education and curiosity, plucking of the product in the field and purchase of the fresh product in the base of each county has a profound effect on the arena of the agricultural tourism of the Southern Khorasan Province since the first arena possesses the highest produce of saffron and barberry and the second arena highest production of pomegranate. However, though the third arena is recognized in the country for its jujube produce and has an abundant production, it has attained the third position for the agricultural tourism of southern Khorasan.

### **Discussion and conclusion**

Since there exist many rural areas in the southern Khorasan Province, which are suffering from the economic stagnation and have very high immigrants. In addition to facing tourist absorbing capacity, it necessitates to compound the agricultural output and tourisms in these areas and diversity to the rural economic potentialities should be assessed and the necessary options for the formation of the tourism flow in this area should be enforced. In this regard, the following recommendations are being presented.

1. Drafting a comprehensive agricultural tourism plan and the precise identification of the agricultural tourism talents in different areas of the South Khorasan province

2. Procurement of the agricultural tourism map of each product for the attraction of hidden demands<sup>2</sup> and responding to the current demand. With the agricultural tourism map, one can manage the tourist movement flow in a manner that the stable coefficient in a village or a farm is increased and a more profit is attained by the area. For example, in the Qaenat county agricultural tourism, the saffron fields, barberry orchards, the desert of Hemmat Abad, the aimed village for Effin tourism and the tourism spot of Abuzer Jomher were spotted so that the less known attraction are also subjected to visits.

3. The cooperation of the responsible institution is necessary in order to recognize the agricultural tourism fields as the fast returning agencies and ravages with regards to the utilization of bank facilities and background forming and benefits from the private sector supports for the investment in the region agricultural tourism section and formation of farms and orchards agricultural tourism businesses.

4. Background information should be obtained and people should be encouraged to participate in order to develop the under constructions, tourism equipments and facilities and earning from this manner and also utilizing the private sector participation in the fields that people cannot participate and invest otherwise.

5. Utilizing the expert forces (Tours and tourism agencies, investors and the arts association) in order to form the cooperative organizations for the people and also promotion and tourism education *via* the meetings and different sessions with the people of the studied regions.

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<sup>2</sup> In few of the cases the client have demands, but since till yet none of the companies have not given an attention to those demands, this demand has remained in silent and hidden form, but as a company present a product for the response to this demand with a very low advertising cost the clients will show an interest in the inception of that product

6. Efforts to create the tourism cycle in the province for shielding the flow of tourism in the entire seasons

7. Holding festivals and entertainment celebrations – Agritourism education with the grounds and different themes in the villages and towns of the south Khorasan province.

8. Standardization, improvement and quality upgrading of the historical monuments of the province such as the inns and historical castles and the outback orchard homes for the reason of tourists scan in the cells and their rooms and if possible, conversion to the local market for selling traditional and agricultural products.

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